

AMENDMENTS TO THE CLAIMS

The listing of claims provided below will replace all prior versions, and listings, of claims in the application.

Listing of claims

1. (Currently Amended) A method for protecting against vitrectomy-related cataract development comprising
 - (i) providing a low oxygen-concentration vitreous replacement solution, wherein a portion of oxygen is removed from an initial vitreous replacement solution by a method selected from the group consisting of introducing an essentially-oxygen-free gas into the initial vitreous replacement solution, subjecting the initial vitreous replacement solution to a vacuum, and a combination of introducing an essentially-oxygen-free gas into the initial vitreous replacement solution and subjecting the initial vitreous replacement solution to a partial vacuum;
 - (ii) replacing, during vitrectomy, vitreous humor with the low oxygen-concentration vitreous replacement solution in a subject in need of such treatment.
2. (Original) The method of claim 1, wherein the oxygen concentration of the low oxygen-concentration solution is between about 0% and about 2%.
3. (Original) The method of claim 2, wherein the oxygen concentration is about 0%.
4. (Original) The method of claim 1, wherein the low-oxygen-concentration solution includes reduced glutathione and ascorbic acid.
5. (Original) The method of claim 1, wherein the low-oxygen-concentration solution includes reduced glutathione.
6. (Original) The method of claim 5, wherein the glutathione in the solution has a concentration between about 0.01 mM and about 10 mM.
7. (Original) The method of claim 6, wherein the glutathione concentration is between about 0.1 mM: and about 2 mM.

8. (Original) The method of claim 7, wherein the glutathione concentration is about 1 mM.
9. (Canceled)
10. (Canceled)
11. (Previously presented) The method of claim 1, wherein the initial solution is subjected to the at least a partial vacuum for about 10 minutes to about 15 minutes.
12. (Canceled)
13. (Previously presented) The method of claim 1, wherein the essentially-oxygen-free gas is an inert gas.
14. (Previously presented) The method of claim 1, wherein the essentially-oxygen-free gas is a noble gas.
15. (Previously presented) The method of claim 1, wherein the essentially-oxygen-free gas is nitrogen gas.
16. (Previously presented) The method of claim 1, wherein the essentially-oxygen-free gas is introduced into the initial solution by bubbling the gas through the initial solution, thereby producing a low-oxygen-concentration solution.
17. (Original) The method of claim 16, wherein the gas is bubbled through the initial solution for about 10 minutes immediately prior to introduction of the low-oxygen-concentration solution into an eye of a subject.
18. (Original) The method of claim 1, wherein the low-oxygen-concentration solution includes ascorbic acid.
19. (Original) The method of claim 18, wherein the ascorbic acid in the solution has a concentration that is sufficiently high to protect against cataract development in a subject.
20. (Original) The method of claim 18, wherein the ascorbic acid concentration is between about 0 mM and about 10 mM.

21. (Original) The method of claim 20, wherein the ascorbic acid concentration is between about 0.5 mM and about 5 mM.

22. (Original) The method of claim 21, wherein the ascorbic acid concentration is between about 1 mM and about 3 mM.

23. (Original) The method of claim 22, wherein the ascorbic acid concentration is about 2 mM.

24-30. (Canceled)